

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1	"5554854".pn.	US-PGPUB; USPAT	OR	ON	2010/04/22 18:19
L2	0	L1 and ((extract\$4 near3 electrode) with (heater or heating) with (condensation near3 temperature))	US-PGPUB; USPAT	OR	ON	2010/04/22 18:23
L3	0	L1 and ((reactive adj1 gas) with clean\$4) and (remov\$4 with deposit with surface)	US-PGPUB; USPAT	OR	ON	2010/04/22 18:24
L4	1	"7531819".pn.	US-PGPUB; USPAT	OR	ON	2010/04/22 18:33
L5	1	L4 and ((reactive adj1 gas) with clean\$4) and (remov\$4 with deposit with surface)	US-PGPUB; USPAT	OR	ON	2010/04/22 18:33
L6	0	L5 and ((extract\$4 near3 electrode) with (heater or heating) with (condensation near3 temperature))	US-PGPUB; USPAT	OR	ON	2010/04/22 18:34
L7	0	L5 and ((extract\$4 near3 electrode) with (activat\$4 or "on") with ((ioniz\$4 near4 deactivat\$4) or "off"))	US-PGPUB; USPAT	OR	ON	2010/04/22 18:36
L8	2	L1 or L4	US-PGPUB; USPAT	OR	ON	2010/04/22 18:36
L9	0	L8 and ((extract\$4 near3 electrode) with (activat\$4 or "on") with ((ioniz\$4 near4 deactivat\$4) or "off"))	US-PGPUB; USPAT	OR	ON	2010/04/22 18:37
L10	6384	(250/423R,424-427,431,489,492.21,492.3, 493.1).ccls.	US-PGPUB; USPAT	OR	ON	2010/04/22 18:37
L11	2833	(315/111.01-111.91).ccls.	US-PGPUB; USPAT	OR	ON	2010/04/22 18:37
L12	8689	L10 or L11	US-PGPUB; USPAT	OR	ON	2010/04/22 18:38
L13	7	L12 and ((reactive adj1 gas) with clean\$4) and (remov\$4 with deposit with surface)	US-PGPUB; USPAT	OR	ON	2010/04/22 18:38
L14	0	L8 and ((reactive with clean\$4) with (activat\$4 or "on") with ((ioniz\$4 near4 deactivat\$4) or "off"))	US-PGPUB; USPAT	OR	ON	2010/04/22 18:39
L15	0	L13 and ((reactive with clean\$4) with (activat\$4 or "on") with ((ioniz\$4 near4 deactivat\$4) or "off"))	US-PGPUB; USPAT	OR	ON	2010/04/22 18:39
L16	5	L13 and ((extract\$4 near3 electrode) with (heater or heating) with (condensation near3 temperature))	US-PGPUB; USPAT	OR	ON	2010/04/22 18:40
S4	1	"20070241689".pn.	US-PGPUB; USPAT	OR	ON	2008/02/28 16:38
S5	4	"20070210260".pn. or "20060272775".pn. or "20060272776".pn. or "20070108395".pn.	US-PGPUB; USPAT	OR	ON	2008/02/28 16:16

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S6	2	"20040000647".pn. or "6686595".pn.	US-PGPUB; USPAT	OR	ON	2008/02/28 16:35
S7	1	S4 and ionization	US-PGPUB; USPAT	OR	ON	2008/02/28 16:39
S8	1	S4 and ionized	US-PGPUB; USPAT	OR	ON	2008/02/28 16:47
S9	2	"6452338".pn. or "6686595".pn.	US-PGPUB; USPAT	OR	ON	2008/02/28 16:49
S10	7	S5 or S6 or S9	US-PGPUB; USPAT	OR	ON	2008/02/28 16:50
S11	2	"6288403".pn. or "6452338".pn.	US-PGPUB; USPAT	OR	ON	2008/02/28 16:49
S12	8	S5 or S6 or S9 or S11	US-PGPUB; USPAT	OR	ON	2008/02/28 16:50
S13	4	S12 and ((ionization or ion) adj1 chamber) and (high adj1 voltage) and inlet and (extraction with aperture) and (vacuum adj1 (system or housing))	US-PGPUB; USPAT	OR	ON	2008/02/29 08:46
S14	2	S12 and ((ionization or ion) adj1 chamber) and (high adj1 voltage) and inlet and (extraction with aperture) and (vacuum adj1 (system or housing)).clm.	US-PGPUB; USPAT	OR	ON	2008/02/28 16:57
S15	1	S14 and ((reactive adj1 gas) with clean\$4). clm.	US-PGPUB; USPAT	OR	ON	2008/02/28 17:06
S16	5116	(250/423R,424-427,431,489,492.21,492.3, 493.1).ccls.	US-PGPUB; USPAT	OR	ON	2008/02/29 08:46
S17	2517	(315/111.01-111.91).ccls.	US-PGPUB; USPAT	OR	ON	2008/02/29 08:46
S18	7190	S16 or S17	US-PGPUB; USPAT	OR	ON	2008/02/28 17:05
S19	20	S18 and ((ionization or ion) adj1 chamber) and (high adj1 voltage) and inlet and (extraction with aperture) and (vacuum adj1 (system or housing))	US-PGPUB; USPAT	OR	ON	2008/02/28 17:12
S20	3	S19 and ((reactive adj1 gas) with clean\$4) and (remov\$4 with deposit with surface)	US-PGPUB; USPAT	OR	ON	2008/02/28 17:13
S21	31	(ion adj1 source) and ((ionization or ion) adj1 chamber) and (high adj1 voltage) and inlet and (extraction with aperture) and (vacuum adj1 (system or housing))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/28 17:22
S22	5	S21 and ((reactive adj1 gas) with clean\$4) and (remov\$4 with deposit with surface)	US-PGPUB; USPAT	OR	ON	2008/02/28 17:20
S23	2	S22 not S20	US-PGPUB; USPAT	OR	ON	2008/02/28 17:13

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S24	4	(ion adj1 source) and ((ionization or ion) adj1 chamber) and (high adj1 voltage) and inlet and (extraction with aperture) and (vacuum adj1 (system or housing)).clm.	US-PGPUB	OR	ON	2008/02/28 17:20
S25	2	S24 and ((reactive adj1 gas) with clean\$4) and (remov\$4 with deposit with surface).clm.	US-PGPUB; USPAT	OR	ON	2008/02/28 17:22
S26	0	horsky-thomas.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/28 17:22
S27	55	horsky-thomas-n.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/28 17:22
S28	9	S27 and (ion adj1 source) and ((ionization or ion) adj1 chamber) and (high adj1 voltage) and inlet and (extraction with aperture) and (vacuum adj1 (system or housing))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/28 17:22
S29	2	S28 and ((reactive adj1 gas) with clean\$4) and (remov\$4 with deposit with surface).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/28 17:27
S30	267	(315/111.91).CCLS.	US-PGPUB; USPAT	OR	OFF	2008/02/28 17:27
S31	5116	(250/423R,424-427,431,489,492.21,492.3,493.1).ccls.	US-PGPUB; USPAT	OR	ON	2008/02/29 08:46
S32	2517	(315/111.01-111.91).ccls.	US-PGPUB; USPAT	OR	ON	2008/02/29 08:46
S33	7190	S31 or S32	US-PGPUB; USPAT	OR	ON	2008/02/29 08:46
S34	20	S33 and ((ionization or ion) adj1 chamber) and (high adj1 voltage) and inlet and (extraction with aperture) and (vacuum adj1 (system or housing))	US-PGPUB; USPAT	OR	ON	2008/02/29 12:58
S35	0	S34 and (surface with contaminat\$4 with deposit\$4)	US-PGPUB; USPAT	OR	ON	2008/02/29 09:54
S36	6	S34 and (contaminat\$4 with deposit\$4)	US-PGPUB; USPAT	OR	ON	2008/02/29 09:31

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S37	14	S34 not S36	US-PGPUB; USPAT	OR	ON	2008/02/29 08:57
S38	0	S33 and (((vapor or gas) near31 generat\$4) with (disassociat\$4 or dissociat\$4) with (condens\$4 with surface))	US-PGPUB; USPAT	OR	ON	2008/02/29 09:04
S39	0	S33 and (((vapor or gas) near3 generat\$4) with (disassociat\$4 or dissociat\$4) with (condens\$4 with surface))	US-PGPUB; USPAT	OR	ON	2008/02/29 09:32
S40	2	S33 and ((gas near3 generat\$4) with (focus\$3 near3 (electron adj1 beam)))	US-PGPUB; USPAT	OR	ON	2008/02/29 09:32
S41	249	S33 and (plasma adj2 (chamber or generat\$4)) and (reactive adj1 gas)	US-PGPUB; USPAT	OR	ON	2008/02/29 09:33
S42	6	S41 and ((borohydride with vapor\$5) or (decaborane or (octa adj2 decaborane)))	US-PGPUB; USPAT	OR	ON	2008/02/29 09:35
S43	0	S33 and ((fluorine or halogen) with (disassociat\$4 or dissociat\$4) with (condens\$4 with surface))	US-PGPUB; USPAT	OR	ON	2008/02/29 09:36
S44	60	S33 and ((fluorine or halogen) with (disassociat\$4 or dissociat\$4))	US-PGPUB; USPAT	OR	ON	2008/02/29 09:13
S45	18	S44 and (reactive adj2 (gas or vapor))	US-PGPUB; USPAT	OR	ON	2008/02/29 09:36
S46	0	S45 and (clean\$4 with surface with contaminat\$4 with condensat\$4)	US-PGPUB; USPAT	OR	ON	2008/02/29 09:37
S47	1	S45 and (clean\$4 with surface with (contaminat\$4 or condensat\$4))	US-PGPUB; USPAT	OR	ON	2008/02/29 09:15
S48	2	S44 and (clean\$4 with surface with (contaminat\$4 or condensat\$4))	US-PGPUB; USPAT	OR	ON	2008/02/29 09:16
S49	2	S44 and (aluminum with surface with (contaminat\$4 or condensat\$4))	US-PGPUB; USPAT	OR	ON	2008/02/29 09:38
S50	10	S44 and ((mass adj2 (analyzer or analysis)) with implant\$5)	US-PGPUB; USPAT	OR	ON	2008/02/29 09:38
S51	3	S44 and (monitor\$4 with cleaning with (reactive adj1 gas))	US-PGPUB; USPAT	OR	ON	2008/02/29 09:41
S52	0	S44 and ((end adj1 point) with detect\$4 with (chemical adj1 analysis))	US-PGPUB; USPAT	OR	ON	2008/02/29 09:41
S53	13	S44 and (temperature with (detect\$4 or sens\$4)) and (heat\$4 with condensat\$4)	US-PGPUB; USPAT	OR	ON	2008/02/29 09:42
S54	21	S44 and (implant\$5 with target) and (arsen\$4 or phosphorus or antimony or silicon or germanium)	US-PGPUB; USPAT	OR	ON	2008/02/29 09:44
S55	6	S54 and (clean\$4 with surface)	US-PGPUB; USPAT	OR	ON	2008/02/29 09:29

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S56	31	((ionization or ion) adj1 chamber) and (high adj1 voltage) and inlet and (extraction with aperture) and (vacuum adj1 (system or housing))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 09:45
S57	0	S56 and (surface with contaminat\$4 with deposit\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 09:31
S58	8	S56 and (contaminat\$4 with deposit\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 09:31
S59	0	S56 and (((vapor or gas) near3 generat\$4) with (disassociat\$4 or dissociat\$4) with (condens\$4 with surface))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 09:32
S60	0	S56 and ((gas near3 generat\$4) with (focus\$3 near3 (electron adj1 beam)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 09:32
S61	8	S56 and (plasma adj2 (chamber or generat\$4)) and (reactive adj1 gas)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 09:33
S62	22	S56 and ((borohydride with vapor\$5) or (decaborane or (octa adj2 decaborane)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 09:35

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S63	9	S56 and ((borohydride with vapor\$5) or (decaboL31 and L32rane or (octa adj2 decaborane)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 09:35
S64	8	S62 and S61	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 09:36
S65	0	S56 and ((fluorine or halogen) with (disassociat\$4 or dissociat\$4) with (condens\$4 with surface))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 09:36
S66	8	S62 and (reactive adj2 (gas or vapor))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 09:37
S67	0	S56 and (clean\$4 with surface with contaminat\$4 with condensat\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 09:37
S68	0	S56 and (clean\$4 with surface with (contaminat\$4 or condensat\$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 09:38
S69	0	S56 and (aluminum with surface with (contaminat\$4 or condensat\$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 09:38

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S70	9	S56 and ((mass adj2 (analyzer or analysis)) with implant\$5)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 09:39
S71	8	S70 and (monitor\$4 with cleaning with (reactive adj1 gas))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 09:39
S72	8	S56 and (monitor\$4 with cleaning with (reactive adj1 gas))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 09:41
S73	0	S56 and ((end adj1 point) with detect\$4 with (chemical adj1 analysis))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 09:41
S74	22	S56 and (temperature with (detect\$4 or sens\$4)) and (heat\$4 with condensat\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 09:43
S75	14	S56 and (implant\$5 with target) and (arsen\$4 or phosphorus or antimony or silicon or germanium)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 09:44
S76	4	((ionization or ion) adj1 chamber) and (high adj1 voltage) and inlet and (extraction with aperture) and (vacuum adj1 (system or housing)).clm.	US-PGPUB	OR	ON	2008/02/29 09:47
S77	267	(315/111.91).CCLS.	US-PGPUB; USPAT	OR	OFF	2008/02/29 09:47
S78	22	S33 and ((ionization or ion) adj1 chamber) and (high adj1 voltage) and inlet and (extraction with aperture)	US-PGPUB; USPAT	OR	ON	2008/02/29 09:53

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S79	16	S78 and (surface with (contaminat\$4 or deposit\$4))	US-PGPUB; USPAT	OR	ON	2008/02/29 09:50
S80	12	"6135128".pn. or "6259105".pn. or "6894245".pn. or "5294797".pn. or "20060237663".pn. "20050178975".pn. or "4105916".pn. or "6818909".pn. or "6686601".pn. or "20070137671".pn. or "20070119546".pn. or "20070085021".pn.	US-PGPUB; USPAT	OR	ON	2008/02/29 13:08
S81	3	S80 and ((ionization or ion) adj1 chamber) and (high adj1 voltage) and inlet and (extraction with aperture)	US-PGPUB; USPAT	OR	ON	2008/02/29 12:29
S82	13	S34 and (surface with (contaminat\$4 or deposit\$4)) and (vacuum with housing with pump\$4)	US-PGPUB; USPAT	OR	ON	2008/02/29 12:31
S83	3	S80 and (surface with (contaminat\$4 or deposit\$4)) and (vacuum with housing with pump\$4)	US-PGPUB; USPAT	OR	ON	2008/02/29 10:01
S84	0	S81 and S83	US-PGPUB; USPAT	OR	ON	2008/02/29 09:55
S85	5	S80 and (reactive near3 gas)	US-PGPUB; USPAT	OR	ON	2008/02/29 10:01
S86	2	S85 and S83	US-PGPUB; USPAT	OR	ON	2008/02/29 10:02
S87	2	"20070241689".pn. or "20070210260".pn.	US-PGPUB; USPAT	OR	ON	2008/02/29 12:14
S88	1	S80 and (vaporiz\$4 with solid)	US-PGPUB; USPAT	OR	ON	2008/02/29 12:35
S89	1	"4105916".pn.	US-PGPUB; USPAT	OR	ON	2008/02/29 12:14
S90	1	S89 and "25" and "26"	US-PGPUB; USPAT	OR	ON	2008/02/29 12:17
S91	0	S89 and (reactive near2 gas)	US-PGPUB; USPAT	OR	ON	2008/02/29 12:18
S92	0	S89 and (reactive with gas)	US-PGPUB; USPAT	OR	ON	2008/02/29 12:32
S93	0	S81 and (extraction near3 electrode)	US-PGPUB; USPAT	OR	ON	2008/02/29 12:20
S94	0	S81 and (extraction with electrode)	US-PGPUB; USPAT	OR	ON	2008/02/29 12:21
S95	16	S78 and (extraction with electrode)	US-PGPUB; USPAT	OR	ON	2008/02/29 12:22
S96	1	S83 and (extraction with electrode)	US-PGPUB; USPAT	OR	ON	2008/02/29 12:28
S97	6	S83 or S81	US-PGPUB; USPAT	OR	ON	2008/02/29 12:28
S98	1	S97 and (extraction with electrode)	US-PGPUB; USPAT	OR	ON	2008/02/29 12:28

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S99	3	S97 and ((ionization or ion) adj1 chamber) and (high adj1 voltage) and inlet and (extraction with aperture)	US-PGPUB; USPAT	OR	ON	2008/02/29 12:30
S100	0	S83 and ((ionization or ion) adj1 chamber) and (high adj1 voltage) and inlet and (extraction with aperture)	US-PGPUB; USPAT	OR	ON	2008/02/29 12:30
S101	3	S83 and (surface with (contaminat\$4 or deposit\$4)) and (vacuum with housing with pump\$4)	US-PGPUB; USPAT	OR	ON	2008/02/29 12:35
S102	786111	S99 and (reactive with gas) or clean\$4	US-PGPUB; USPAT	OR	ON	2008/02/29 12:32
S103	0	S99 and ((reactive or cleaning\$4) with gas)	US-PGPUB; USPAT	OR	ON	2008/02/29 12:34
S104	1	S99 and (cleaning)	US-PGPUB; USPAT	OR	ON	2008/02/29 12:33
S105	0	S104 and ((reactive or cleaning\$4) with gas)	US-PGPUB; USPAT	OR	ON	2008/02/29 12:34
S106	0	S104 and ((reactive or cleaning) with gas)	US-PGPUB; USPAT	OR	ON	2008/02/29 12:34
S107	0	S101 and (vaporiz\$4 with solid)	US-PGPUB; USPAT	OR	ON	2008/02/29 12:35
S108	0	S34 and ((ionization or ion) adj1 source) and (extraction with electrode) and ((electric adj1 heater) with (maintain\$4 near3 temperature))	US-PGPUB; USPAT	OR	ON	2008/02/29 13:01
S109	0	S33 and ((ionization or ion) adj1 source) and (extraction with electrode) and ((electric adj1 heater) with (maintain\$4 near3 temperature))	US-PGPUB; USPAT	OR	ON	2008/02/29 13:01
S110	19	S33 and ((ionization or ion) adj1 source) and (extraction with electrode) and (heater with (maintain\$4 near3 temperature))	US-PGPUB; USPAT	OR	ON	2008/02/29 13:04
S111	13	S110 and ((vapor\$5 or vaporiz\$4) with condensation with temperature)	US-PGPUB; USPAT	OR	ON	2008/02/29 13:04
S112	27	((ionization or ion) adj1 source) and (extraction with electrode) and (heater with (maintain\$4 near3 temperature))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 13:09
S113	20	S112 and ((vapor\$5 or vaporiz\$4) with condensation with temperature)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 13:06

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S11 4	7	S113 not S111	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 13:05
S11 5	0	S97 and ((vapor\$5 or vaporiz\$4) with condensation with temperature)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 13:07
S11 6	16	S34 and ((vapor\$5 or vaporiz\$4) with condensation with temperature)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 13:08
S11 7	0	S80 and ((vapor\$5 or vaporiz\$4) with condensation with temperature)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 13:08
S11 8	0	S80 and ((vapor\$5 or vaporiz\$4) and (condensation with temperature))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 13:09
S11 9	63	S33 and (heater with (maintain\$4 near3 temperature))	US-PGPUB; USPAT	OR	ON	2008/02/29 13:09
S12 0	22	S119 and ((vapor\$5 or vaporiz\$4) and (condensation with temperature))	US-PGPUB; USPAT	OR	ON	2008/02/29 13:22
S12 1	5	"20020195950".pn. or "6441553".pn. or "6388263".pn. or "5747818".pn. or "4155008".pn.	US-PGPUB; USPAT	OR	ON	2008/02/29 13:19
S12 2	0	S121 and ((ion adj1 source) with implant\$5) and ((extract\$4 near3 electrode) with (heater or heating) with (maintain near3 temperature))	US-PGPUB; USPAT	OR	ON	2008/02/29 13:21
S12 3	0	S121 and ((ion adj1 source) with implant\$5) and ((extract\$4 near3 electrode) with (heater or heating) with maintain\$4 with temperature)	US-PGPUB; USPAT	OR	ON	2008/02/29 13:19
S12 4	0	S121 and ((ion adj1 source) with implant\$5) and ((extract\$4 near3 electrode))	US-PGPUB; USPAT	OR	ON	2008/02/29 13:19

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S12 5	0	S121 and ((ion adj1 source) and (extract\$4 near3 electrode))	US-PGPUB; USPAT	OR	ON	2008/02/29 13:19
S12 6	6	((ion adj1 source) with implant\$5) and ((extract\$4 near3 electrode) with (heater or heating) with (maintain near3 temperature))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 13:21
S12 7	6	S126 and ((vapor\$5 or vaporiz\$4) and (condensation with temperature))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/29 13:22
S12 8	1	"2008087219".pn. or "4851668".pn.	US-PGPUB; USPAT	OR	ON	2009/03/04 13:21
S12 9	2	"20080087219".pn. or "4851668".pn.	US-PGPUB; USPAT	OR	ON	2009/03/04 13:22
S13 2	2	"20070241689".pn. or "20070210260".pn.	US-PGPUB; USPAT	OR	ON	2009/03/04 13:26
S13 3	3	"20080087219".pn. or "20070170372".pn. or "4851668".pn.	US-PGPUB; USPAT	OR	ON	2009/03/04 13:37
S13 4	5	S132 or S133	US-PGPUB; USPAT	OR	ON	2009/03/04 13:38
S13 5	5724	(250/423R,424-427,431,489,492.21,492.3, 493.1).ccls.	US-PGPUB; USPAT	OR	ON	2009/03/04 13:44
S13 6	2667	(315/111.01-111.91).ccls.	US-PGPUB; USPAT	OR	ON	2009/03/04 13:44
S13 7	7909	S135 or S136	US-PGPUB; USPAT	OR	ON	2009/03/04 13:44
S13 8	4	S137 and ((ion adj1 (source or implant\$5)) and ((extract\$4 near3 electrode) with (heater or heating) with (maintain near3 temperature)))	US-PGPUB; USPAT	OR	ON	2009/03/04 13:46
S13 9	4	S137 and ((ion adj1 (source or implant\$5)) and ((extract\$4 near3 electrode) with (heater or heating) with (condensation near3 temperature)))	US-PGPUB; USPAT	OR	ON	2009/03/04 15:12
S14 0	4	S138 or S139	US-PGPUB; USPAT	OR	ON	2009/03/04 15:12
S14 1	67	((ionization or ion) adj1 (source or chamber)) and (high adj1 voltage) and inlet and (extraction with aperture) and (vacuum adj1 (system or housing))	US-PGPUB; USPAT	OR	ON	2009/03/04 15:19

EAST Search History (Prior Art)

S14 2	6	S141 and ((extract\$4 near3 electrode) with (heater or heating) with (condensation near3 temperature))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/04 15:20
S14 3	3	S141 and ((extract\$4 near3 electrode) with (heater or heating) with (condensation near3 temperature)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/04 15:21
S14 4	1	"20060272775".pn.	US-PGPUB; USPAT	OR	ON	2009/03/04 15:28
S14 5	1	"20080121811".pn.	US-PGPUB; USPAT	OR	ON	2009/03/04 15:29
S14 6	0	S145 and ((extract\$4 near3 electrode) with (heater or heating) with (condensation near3 temperature)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/04 15:29
S14 7	1	S145 and ((extract\$4 near3 electrode) with (heater or heating) with (condensation near3 temperature))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/04 15:30
S14 8	0	S145 and ((extract\$4 near3 electrode) with (heater or heating) with (condensation near3 temperature)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/04 15:30
S14 9	7	S141 and ((reactive adj1 gas) with clean\$4) and (remov\$4 with deposit with surface)	US-PGPUB; USPAT	OR	ON	2009/03/04 15:36
S15 0	1	"5466941".pn.	US-PGPUB; USPAT	OR	ON	2009/09/30 11:27
S15 1	0	S150 and (reactive with clean\$4)	US-PGPUB; USPAT	OR	ON	2009/09/30 11:28
S15 2	0	S150 and (clean\$4)	US-PGPUB; USPAT	OR	ON	2009/09/30 11:28
S15 3	1	S150 and (extract\$4 near4 electrode)	US-PGPUB; USPAT	OR	ON	2009/09/30 11:29
S15 4	1	S150 and (extract\$4 near4 aperture)	US-PGPUB; USPAT	OR	ON	2009/09/30 11:30

EAST Search History (Prior Art)

S15 5	0	S150 and ((extract\$4 near4 electrode) with temperature)	US-PGPUB; USPAT	OR	ON	2009/09/30 11:34
S15 6	0	S150 and (extract\$4 with temperature)	US-PGPUB; USPAT	OR	ON	2009/09/30 11:34
S15 7	1	S150 and (extract\$4 with heater)	US-PGPUB; USPAT	OR	ON	2009/09/30 11:36
S15 8	1	S150 and ("12" or "18")	US-PGPUB; USPAT	OR	ON	2009/09/30 11:37
S15 9	6	"4450031".pn. or "4697069".pn. or "6391148".pn. or "6670623".pn. or "6033973".pn. or "20050242293".pn.	US-PGPUB; USPAT	OR	ON	2009/09/30 11:46
S16 0	7	S150 or S159	US-PGPUB; USPAT	OR	ON	2009/09/30 11:47
S16 1	1	S160 and ((ion adj1 source) with (extract\$4 near4 electrode) with temperature)	US-PGPUB; USPAT	OR	ON	2009/09/30 11:47
S16 2	5	S160 and (aluminum or molybdenum)	US-PGPUB; USPAT	OR	ON	2009/09/30 11:58
S16 3	3	S160 and (ion with implant\$5)	US-PGPUB; USPAT	OR	ON	2009/09/30 14:44
S16 4	1	S160 and (cesium)	US-PGPUB; USPAT	OR	ON	2009/09/30 15:27
S16 5	0	S163 and (cesium)	US-PGPUB; USPAT	OR	ON	2009/09/30 15:28
S16 6	3	S160 and (aluminum)	US-PGPUB; USPAT	OR	ON	2009/09/30 15:37
S16 7	0	S160 and (radiative near3 heater)	US-PGPUB; USPAT	OR	ON	2009/09/30 15:44
S16 8	1	S150 and (heater)	US-PGPUB; USPAT	OR	ON	2009/09/30 15:47
S16 9	2	S150 or "20050242293".pn.	US-PGPUB; USPAT	OR	ON	2009/09/30 15:50
S17 0	1	S169 and (heater)	US-PGPUB; USPAT	OR	ON	2009/09/30 15:50
S17 1	8	S150 or S159 or "7531819".pn.	US-PGPUB; USPAT	OR	ON	2009/09/30 16:20
S17 2	0	S171 and (clean\$4 with ((discontin\$4 or stop\$4 or de-energiz\$4) near3 source))	US-PGPUB; USPAT	OR	ON	2009/09/30 16:26